Amendments to the Claims:

1. (Currently amended) [[The]] A method of simulating service loads comprising the steps of:

a)[[.]] developing a service load history database including multiple time series models representative of different service load conditions;

b)[[.]] combining the multiple time series models;

c)[[.]] adjusting a parameter of each of the time series models and creating an accelerated service load model;

d)[[.]] regenerating random vibration load data based upon the accelerated service load model; and

e)[[.]] feeding the random vibration load data to a drive simulation system to thereby cause the drive simulation system to simulate service loads in accordance with the random vibration load data.

2. (Currently amended) The method as recited in claim 1 wherein said step of developing a service load history database further comprises modeling original random vibration ~~tests~~ service loads in different time series models.

3. (Currently amended) The method as recited in claim 2 wherein said step of adjusting the parameter ~~$\emptyset_i$ (i=1,...n)~~ of each of the time series models further comprises changing a value of a variance σ^2_a, where

$$f(\omega)=\frac{\Delta\sigma_a^2}{2\pi}\frac{1}{\left|e^{ni\omega\Delta}-\phi_1 e^{(n-1)i\omega\Delta}-\ldots-\phi_n\right|^2},-\frac{\pi}{\Delta}\le\omega\le\frac{\pi}{\Delta},$$

wherein $f(\omega)$ is an autospectrum of the time series model for a sampling interval Δ as a function of angular frequency ω, and wherein $\emptyset_i$ represents said parameter of each of the time series models for i=1...n.

4. (Original) The method as recited in claim 3 wherein said step of regenerating the random vibration load data is based upon a recursive formula.

5. (Original) The method as recited in claim 4 wherein said step of feeding the load data to a drive simulation system further comprises converting a digital signal to an analog signal and transmitting said analog signal to actuators.